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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/238,859	01/28/99	SIMON	U GK-ZEL-3039

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EXAMINER

VERBITSKY, G

ART UNIT PAPER NUMBER

2859

DATE MAILED: 03/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/238,859

Applicant(s)

Rothenstein et al.

Examiner

Gall Verbitsky

Group Art Unit
2859



☒ Responsive to communication(s) filed on Jan 26, 2001

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 2 and 4-9 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 2 and 4-9 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7(1pg)

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2-9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this case:

Claim 2: It appears that “regulation to a constant value”, as stated in line 9, is not described in the specification.

Claim 9: It appears that “regulation to a constant value” and driving the AOTF “by a constant frequency” is not described in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 2-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In this case,

Claims 2 and 9: "heating and cooling includes regulation to a constant value" makes the claim language confusing because it is not clear what parameter is to be regulated to a constant value.

Claim 6: the claim is rejected as being a substantial duplication of claim 2,

Claim 7: the claim language is confusing because it is not clearly indicated the relationship between the temperature claimed in claim 7 and the parameter kept at a constant value stated in claim 2. It appears that they are the same.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Prior Art as stated by applicant in pages 1-2 of the specification [hereinafter Prior art] in view of Kemeny et al. [hereinafter Kemeny].

Prior Art discloses a laser scanning microscope with an AOTF, particularly the need to avoid temperature fluctuations when using the AOTF.

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Prior art does not disclose a temperature gauge provided in the environment of the AOTF, a heater and a heater controller to control the AOTF temperature at a constant value.

Kemeny discloses in Figs. 6-8 a device to control an AOTF comprising an AOTF 102, a heater 164, temperature sensor (gauge) 167, 170 connected to a heater controller (regulator) 166 and located within vicinity of the AOTF. The heater is capable of maintaining the temperature of the AOTF within 1°C of the desired temperature which is above 35° (col. 8, lines 16-19), that is the heater controller, in a broad sense, regulates the temperature of the AOTF to a constant value. Output lines 190a and 190b are carrying a signal from the temperature sensors to a controller (driving unit) 300. Cooling of the AOTF is achieved simply by shutting the heater off (entire col. 8). Kemeny suggests to drive the AOTF at any desired frequency (col. 14, lines 22-23). Kemeny also suggests to drive the AOTF at a particular (in a broad sense, constant for at least some period of time) frequency to tune a particular wavelength band (col. 11, lines 58-59). The application of the particular (constant) frequency to the AOTF changes the direction of the propagation and polarization of the narrow wavelength band of the incident radiation, yielding two tuned radiation beams which diverge from each other and non-tuned radiation. The tuned wavelength can be used to analyze a sample (col. 2, lines 20-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a temperature sensor, a heater and a heater regulator, as taught by Kemeny, to the device with the AOTF disclosed by the Prior Art in order to be able to provide

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corrections for variations in the temperature of the AOTF (col. 13, lines 33-34), as already suggested by Kemeny.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to modify the device disclosed by the Prior Art such that to drive the AOTF with a particular (constant) frequency, as taught by Kemeny, because the application of the particular (constant) frequency to the AOTF changes the direction of the propagation and polarization of the narrow wavelength band of the incident radiation, yielding two tuned radiation beams which diverge from each other and non-tuned radiation, with the tuned radiation beams being then used to analyze a sample (col. 2, lines 20-31).

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Response to Arguments

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8. Applicant's arguments with respect to claims 2, 4-9 have been considered but are moot in view of the new ground(s) of rejection necessitated by the present amendment.

A) In response to applicant's argument that the Examiner has combined an excessive number of references, it has been held that the number of references does not have a bearing on the propriety of the rejection; theoretically such could be infinite. *Ex parte Fine*, 1927, C.D. 84 (1926).

B) Applicant states that references are not comparable (page 3). However, The prior Art teaches the use of the laser microscope with the AOTF, Kemeny teaches to measure and control the temperature of the AOTF by driving the heater by constant frequency.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices.

10. Any inquiry concerning this documentation should be directed to the Examiner Verbitsky whose telephone number is (703) 306-5473.

Any inquiry of general nature or related to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

GKV

March 07, 2001



Diego Gutierrez
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